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An Analysis of National Accounts of Bangladesh
1949/50 - 1968/69

by

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M. Alamgir and L. Berlage*

1. Introduction

Like all other developing countries, Bangladesh has very poor national income and expenditure data, although attempts have been made to improve both the methodology and coverage. Since its establishment in 1950 the Central Statistical Office (C.S.O.) of the government of Pakistan has been the main source of information for all national income data. In the fifties, the data collected were usually presented on the basis of Pakistan as a whole, and no attempt was made to draw up the provincial accounts. Needless to say, this was a great handicap in formulating any sensible regional plan for development. A committee of economists and statisticians was appointed in 1961 by the C.S.O. This committee suggested that the C.S.O. publish separate regional accounts (income and expenditure) and present them in both current and constant prices. The publication of the national accounts in current prices was discontinued after 1953-54 and was not resumed until 1963.

However, the problem of generating a reliable set of national accounts data remained unsolved: So in order to examine the available data and suggest methods of improving the accuracy and coverage of data, a National Income Commission was appointed in April 1963. The Commission presented its Interim Report in September 1964, and the Final Report in November 1965. For the

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first time in Pakistan, the Interim Report of the National Income Commission compiled the regional accounts data for the years 1959-60 to 1963-64. In light of the recommendations made by the Commission, the C.S.O. revised its estimates of national income accounts for the previous years and also started making available the regional income accounts separately starting from 1959-60. All of these accounts were prepared in both constant and current factor cost. Dr. T.M. Khan and A. Bergan[1] used the same basic data from the C.S.O.; they also prepared the regional accounts for Bangladesh and Pakistan for earlier years Their estimates differed from the official estimates because Khan and Bergan divided in a 50-50 ratio the unallocated items, i.e.,banking and insurance, central government. Pakistan International Airlines, and net factor income from abroad. The C.S.O. did not allocate these items between regions. However, this assumption is not entirely acceptable, since other available evidence suggests that only an insignificant portion of the first three items can be attributed to Bangladesh.

As is apparent from the above, some progress was made in developing reliable national and regional income data. But the same cannot be said on the expenditure side of the national accounts.

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[1]Taufiq M.Khan and A. Bergan, "Measurement of Structural Change in the Pakistan Economy: A Review of the National Income Estimates 1949/50 - 1963/64," The Pakistan Development Review, Summer, 1966, pp.163-208.

The importance of data on national and regional expenditure for useful economic analysis cannot be minimised. In order to know the uses of the total national resource, one must identify the different components of national expenditure. This will reveal the capacity of the economy to mobilize resources for development. Furthermore, the existing patterns of consumer expenditure will provide a basis for future demand projection as well as for the projection of necessary investment in the relevant sectors.

Only recently the C.S.O. started preparing expenditure data on the Gross National Product. The series is available for pre March 1971 Pakistan from 1963-64. A different estimate was prepared by the Planning Commission for the Second Plan period; this was included in the Final Evaluation of the Second Five Year Plan (1966). Both of these estimates were presented in current and constant prices. As expected, for overlapping years the two estimates do not agree, due to either the difference in methodology or coverage of data. However, the C.S.O. did not make any attempt to prepare separate expenditure account for Bangladesh and Pakistan. The Perspective Planning Section of the Planning Commission in an internal memorandum presented the regional expenditure account for both Bangladesh and Pakistan for the years 1964-65 to 1967-68. Because of the provisional nature of the underlying data, no useful purpose will be served by trying to evaluate the Planning Commission estimates.

Although no systematic attempt was made by any agency or individual in Pakistan to obtain reliable estimates of the different components of national and regional expenditure, one component was singled out for special study. This was the estimate of gross domestic capital formation. Several estimates of investment expenditure are available in Pakistan. However, they are not all consistent with one another in the sense that they do not usually cover the same period, and the methodology is different. The Pakistan Planning Commission provided a consistent set of estimates for the period 1959-60 to 1967-68. These estimates which show breakdown for Bangladesh and Pakistan are presented in the Final Evaluation of the Second Five Year Plan(1966) and Memorandum for the Pakistan Consortium, 1967-68. As will be discussed below, one should notice certain shortcomings of these estimates before using them for analytical purposes. Dr. Mahbubul Haq[2] presents a set of investment estimates for the fifties which is not directly comparable with the Pakistan Planning Commission estimates because the methodology followed by the two is not the same.

This paper attempts to use the data available from various sources to revise the product account and to prepare an expenditure

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[2]Dr. Mahbubul Haq, The Strategy of Economic Planning, A Case Study of Pakistan(Karachi: Oxford University Press,1963),pp.254-55.

account for Bangladesh over the period 1959-60 to 1968-69. The accounts are presented in both constant and current prices. The sources of basic data and the methodology for deriving estimates of the components of income and expenditure will be discussed below. All relevant figures are presented in Tables 1 to 17 of the Appendix. More specifically, section II presents a discussion of all different components of the production account. In particular it spells out in detail the adjustments made to the official data in order to arrive at the corrected series. Components of the expenditure account is presented in section III. Conclusions of the study are presented in general terms in section IV.

II. Production Account

1. Methodology

The Central Statistical Office prepared estimates of Gross Domestic Product (GDP) at current and constant factor cost. However, the C.S.O. did not allocate between regions three components of the Pakistan GDP, viz. banking and insurance. Pakistan International Airlines and central government and defence. Furthermore, the underlying production series for rice and jute are not consistent due to recent changes in the estimation procedure. The GDP figure (prepared by the C.S.O.) has therefore been adjusted first, by

correcting the value-added figure for rice and jute production and trading, and second, by allocating between regions the three components mentioned above. GNP at factor cost is obtained by adding to GDP net factor income from abroad. This was done by allocating the Pakistan figure for this item between Bangladesh and Pakistan and adding the Bangladesh share to GDP. Then indirect taxes less subsidies were added to GNP at factor cost to calculate GNP at market prices. Finally, subtracting direct taxes from GNP at factor cost, an estimate of disposable income was obtained. All figures were calculated at current and constant (1959-60) factor cost. In the following sections, the different steps are described in more detail.

2. Gross Domestic Product Before Adjustments

The C.S.O. figure on GDP at current factor cost from 1959-60 to 1966-67 were published in the Statistical Digest of East Pakistan, 1966 and 1968. However, some of these data appear to have been revised later on. Therefore, for the years 1959-60 to 1965-66, the figures used in this paper were calculated in an indirect way - by subtracting from the GDP figure for Pakistan (reported in the Pakistan Economic Survey 1968-69) the sum of the GDP for West Pakistan and the unallocated items (all reported in the West Pakistan Bureau of Statistics 'Quarterly Bulletin of Performance Statistics, vol. 1, no.1, January 1969). For the years 1966-67 to

1968-69, the unadjusted GDP figures were obtained from unpublished information of the C.S.O. and the Pakistan Planning Commission.

The estimates of GDP at constant 1959-60 factor cost by the C.S.O. were published regularly in the Economic Survey of East Pakistan. The figures in this paper are from this publication for 1969-70. Moreover, for this study Khan and Bergan used C.S.O. data to estimate regional GDP at 1959-60 factor cost from 1949-50 to 1958-59. Their series appear to be consistent with the C.S.O. estimates for later years. Therefore their data were used here, after subtracting the sum of the three components of GDP, which are not allocated by the C.S.O., as imputed to Bangla Desh by these authors, from their GDP figures. GDP before adjustments in constant and current factor cost are presented in appendix Table I and Table 2.

3. Adjustment for Rice and Jute Production

Traditionally, rice and jute acreage, yield and production figures were based on interviews with cultivators and on personal observations of the Union Agricultural Assistants. This is known as the subjective estimation method. Since 1962-63 for yields, 1964-65 for aman and aus acreage, and 1965-66 for jute acreage, an alternative method, called objective, has been used side by side with the subjective method of estimation. The published official production statistics are based on the objective estimates for aus beginning 1965-66 and for jute beginning 1968-69. The official aman statistics still differ from the objective data. A comparison of three series for acreage, yield and production may be found in a paper by D.G. Larson[3] which is

used here.

If one considers the objective data to be standard, the subjective method resulted in a slight overestimation of the aman acreage and a considerable underestimation of both the aus and jute acreage. On the other hand, the subjective yield estimates for both aman and aus were higher than the subjective figure. For jute, however, the official yield statistics, based on sources of information different from the subjective estimates, were higher than the objective data. As a result, the subjective production estimate for aman was consistently higher than the objective one, whereas for aus, there was no persistent relationship between both figures. The official jute production figures were lower than the objective ones.

For the purpose of this paper, rice and jute production series were constructed as follows :

(i) For aus and boro, the official production series were used.

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[3]"A Comparison of Results from Different Methods of Crop Estimation in East Pakistan," paper presented at the CENTO Symposium on Agricultural Statistics, Ankara, Turkey, October 1967.

i) For aman, whenever available, objective acreage and yield data were used. For earlier years data were obtained from regression equations in which the official (subjective) figures appeared as independent variables.[4] Production figures were obtained by multiplying acreage and yield statistics.

ii) For jute, objective acreage and yield data were used for the years for which they were available. A comparison of the objective, subjective, and official series for the years for which all three series were available suggested the following rules as a good approximation for adjusting earlier data. The subjective acreage figures for 1963-64 and 1964-65 and the official acreage figures for earlier years were increased by 900,000 acres which is roughly the average difference between the subjective and objective figures. The official per acre yield figures previous to 1962-63 were reduced by .9 bales. This is roughly the difference between objective and official estimates in 1962-63 and 1963-64. Production again is obtained multiplying both series.

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[4] The regression equations are,

for acreage: $A_o = .988\ A_s$ $R^2 = .733$ (based on 5 observations)

where A_o and A_s stand for objective and subjective aman acreage;

for yield: $\log Y_o = .938 + .113\ Y_s$ $R^2 = .660$ (based on 7 observations)

(1.972) (3.117)

Where Y_o and Y_s stand for objective and subjective yield per acre. Figures within parenthesis are t-statistics.

The Official acreage and yield data are from the following documents: Agricultural Production Levels in East Pakistan 1947-64 (East Pakistan Bureau of Agricultural Statistics, 1966) and Statistical Digest of East Pakistan 1966. The basis for the adjustment for the GDP figures was the difference between the official and the newly generated production series.

To calculate value added of this difference, the methodology of the C.S.O. was followed as closely as possible. For agriculture, unit value of output data was obtained from unpublished C.S.O. information. The value of input was calculated as a percentage of the unit output value. The C.S.O. deducts 1 percent of the output value on account of wastage and 4.7 and 0.6 percent on account of seeds for rice and jute respectively[5]. No exact data were available on the costs of chemical fertilizer use and on water charges, but input-output data suggest that these are small[6]. Therefore the value of inputs was taken to be 7% of output value of rice and 5% for jute. No deduction was made for value-added in milling because the same amount would have to be added in manufacturing[7]. The C.S.O. estimates that 30% of rice output and 98% of jute output was marketed and that trade margins are 20% and 25% respectively. Therefore the adjustment for value-added in trade was calculated as 6% of the adjustment for value-added in agriculture for value-added in agriculture for rice and 24.5% for jute. The sum of the value-added

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[5] Statistical Yearbook, 1968, Central Statistical Office, Government of Pakistan, p.311.

[6] A.R. Khan and A. MacEwan, "Regional Current Input-Output Tables for the East and West Pakistan Economics 1962/63, "Pakistan Institute of Development Economics Research Report Series, No. 63, December 1967.

[7] Alternatively one could deduct milling charge and added the same in the manufacturing sector.

adjustments in agriculture and trade due to corrections in production data for rice and jute was added to the GDP figures described in the previous section to give adjusted GDP without unallocated items. Detailed calculations of the adjustment factors for rice and jute are presented in Appendix Table 5 and Table 6 respectively.

4. Adjustment for Unallocated Items

Three components of the Pakistan GDP were not allocated between regions: banking and insurance, PIA, and the central government and defense. Economists have used different percentages to allocate these components. In their study, Khan and Bergan used a 50-50 ratio. M.A. Rahman[8] imputed 27% of banking insurance and 25.5% of central government and defense for Bangla Desh. These percentages were based on the provincial distribution of deposits and advances of scheduled banks as reported in The Statistics of Scheduled Banks of Pakistan (1963) and on the provincial distribution of the labor force in public administration in 1955. He neglected interwing communications. S.R. Bose[9] imputed 33% of banking and insurance, 30% of central government and defense and 37% of PIA to Bangladesh.

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[8] M.A. Rahman, East and West Pakistan, A Problem in the Political economy of Regional Planning, Harvard University Center for International Affairs, Occasional Papers in International Affairs, no. 20, July 1968.

[9] S.R. Bose, "Trend of Real Income of the Rural Poor in East Pakistan, 1949-66" "Pakistan Development Review" Vol. VIII, No.3, Autumn 1968. P. 478.

He mentions that these percentages have been estimated at one time by C.S.O. and used by a group of experts in the Transportation Survey of East Pakistan (1961). Finally, statistics in the Economic Survey of East Pakistan 1969-70 show that from 1959-60 to 1969-70 deposit liabilities of scheduled banks in Bangladesh as a percentage of those in pre March 1971 Pakistan fluctuated between 21% and 26%. This evidence suggests that there is no significant difference in the percentage of the three unallocated components to be imputed to Bangla Desh. Furthermore, it appeared reasonable to allocate 25% of these items to the region.

Data on the total value-added at current factor cost for 1959-60 to 1965-66 are obtained from the West Pakistan Quarterly Bulletin of Performance Statistics (January 1969). Data for the years 1966-67 to 1968-69 for banking and insurance were directly obtained from unpublished C.S.O. and Pakistan Planning Commission information. For central government, defense and PIA, the estimate was made by subtracting the sum of Bangladesh and Pakistan public administration and defense, and transportation, storage and communication figures from the pre March 1971 Pakistan data.[10]

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[10] The PIA total for 1967-68, obtained by subtraction, was out of line with the rest of the series. It was therefore assumed that the figure was the same as that of the previous year.

For the years 1959-60 to 1968-69 banking and insurance at constant 1959-60 factor cost were taken from the Economic Survey of East Pakistan 1969-70. Data for central administration and defense and PIA at constant factor cost for 1959-60 to 1967-68 are from the above mentioned West Pakistan document. For 1968-69 the total of unallocated components at constant factor cost was obtained from the Reports of the Advisory Panels for the Fourth Five Year Plan, 1970-75 (vol.1, p. 132). Banking and insurance, for which a separate estimate was available, was subtracted from this figure, and the difference was distributed between PIA, central government, and defense in the same proportion as in the previous year.

Constant factor cost data for the period 1949-50 to 1958-59 were obtained from the Khan and Bergan study for banking and insurance directly, and for the other two items by subtraction, as described above.[11] Appendix Table 7a and Table 7b contain adjustment for mallocated items in current and constant factor cost respectively.

5. Gross Domestic Product after Adjustments

Official (C.S.O.) GDP series for Bangladesh was corrected by the adjustment factors obtained following the methodology described above. This, however, does not include the unallocated items which

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[11] In their publication, probably by mistake, PIA was added to transport but also added to central administration and subtracted from local administration in the Pakistan account. In the regional accounts, PIA was included in central administration figures.

were added later. Thus two new series for GDP at constant and current factor cost were obtained which may now be subjected to further analysis. In this paper, however, such analysis is maintained at only a very descriptive level and no attempt is made to introduce any sofhisticated analytic tool. A comparison of the unadjusted GDP series with the adjusted one as given in Appendix Tables 1 and 2 indicate that on the whole the official data overestimated the Gross Domestic Product. The extent of overestimation in constant prices varied between 1 and 6 percent of the official figure. Appendix Tables 3 and 4 present the adjustment factors for rice and jute separately. Clearly for all years, in both constant and current factor cost, the adjustment factor due to rice is negative while that for jute is positive except for 1949-50. However, the combined adjustment figure turns at to be negative for all years.

Over the period between 1949/50 and 1968/69, the adjusted GDP increased at an annual compound rate of growth of 3.1 per cent. This period however, can be clearly sub-divided into two. The first extends from 1949/50 to 1958/59 and the second 1959/60 to 1968/69. During the first period the rate of growth of GDP (1.36) was much lower than that in the second period (4.03). Further more, as shown in the Table below, Bangladesh experienced the highest rate of growth in the period between 1960-61 to 1964-65 which was the second Five Year Plan period of the pre-March 1971 Pakistan.

TABLE I

Bangladesh: Gross Domestic Product at 1959/60 Factor Cost

	1949/50	1954/55	1959/60	1964/65	1968/69
G.D.P. (Tk.million)	11473	13099	14245	17881	21151
Population(Million)	42.3	47.7	53.9	62.8	70.4
Per Capita GDP(Taka)	271	274	264	285	301

Rate of Growth (annoul compound)of G.D.P.

1949/50 to 1968/69	3.1
1949/50 to 1958/59	1.4
1949/60 to 1968/69	4.0
1949/50 to 1954/55	2.2
1955/56 to 1959/60	2.6
1960/61 to 1964/65	3.7
1965/66 to 1968/69	3.2

Source: Appendix Table 2

6. Net Factor Income from Abroad

This is another unallocated item which should be included if one is to derive an estimate of Gross National Product for Bangladesh. Data exist for pre-March 1971 Pakistan in both constant and current prices. The State Bank of Pakistan has detailed information, but no attempt was made to compile them separately for different regions. However, in the Report of the Advisory Panels for the Fourth Five Year Plan, some data have been compiled on the division of invisible receipts and payments between Bangla Desh and Pakistan which, of course, included factor income and payments. Unfortunately from the tables presented in the report, it is difficult to isolate net factor income for the regions. For the present exercise, the pre-March 1971 Pakistan data in current prices taken from the Statistical Year Book of Pakistan, 1968 and Monthly Statistical Bulletin (July, 1970) were divided equally between Bangladesh and Pakistan. Since the absolute magnitude involved is very small, any error in the assumption mentioned above will not affect in any significant way the other estimates derived with the help of this data. In order to arrive at constant price estimate, the current price figures were deflated by import price index when net factor income was positive and by export price index when it was negative. This is also the procedure followed by the C.S.O. However, for the years 1949-50 to 1953-54, the constant price figures were taken directly from Khan and Bergan (1966).

7. Movement of per capita GNP

With the allocation of net factor income from abroad between Bangladesh and Pakistan it was possible to calculate Gross National Product at factor cost. Dividing population into GNP at constant factor cost, per capita GNP over the entire period under consideration was calculated, while for current factor cost the series could be computed only for the period between 1959/60 and 1968/69. Per capita GNP figures both in current and constant prices are presented in Appendix Tables I and 2 and Chart I. It is clear that there were large fluctuations in the per capita GNP over the entire period although the major ones are concentrated between mid fifties and early sixties. Over the entire period per capita GNP increased at an annual compound rate of 1.02 per cent. However, during the period 1949/50 to 1958/59 per capita GNP in constant prices declined by about 2.3 per cent per annum, as it moved from Taka 271 in 1948/49 to Taka 250 in 1958/59. In the period following per capita GNP should a slight upward trend with minor year to year fluctuation. During this period per capita GNP actually increased by about 1.7 per cent per annum. Thus, if one is to accept per capita GNP figure as an index of welfare of the population then there does not seen to have been any market improvement over the course of twenty years.

8. Indirect Taxes Less Subsidies

In order to arrive at Gross National Product at market prices, estimate of indirect taxes less subsidies is necessary for the period under consideration. However, separate data on these items for Bangladesh and Pakistan are very difficult to come by from any published sources, although fairly accurate information should not have been too difficult to obtain from the Central Board of Revenue. The Pakistan Planning Commission made an estimate for different regions for the period 1964-65 to 1967-68. They divided the pre-March 1971 Pakistan figures between the two regions in proportion to the total tax realization in the respective regions. For earlier years, it is assumed here that the Bangladesh's share of indirect taxes was the same as that of 1964-65, and so the pre-March 1971 Pakistan figures were divided accordingly. The current price figures were converted into constant 1959-60 prices by using the general wholesale price index as the deflator. The 1968-69 figure was estimated by applying the previous year's rate of growth of indirect taxes less subsidies.

It can be seen from Table 2 below that, total collection under indirect taxes did not increase much faster than Gross Domestic Product at factor cost. So, even after a considerable period of planned economic development, indirect taxes as a proportion of GDP has remained at the very low level of 5 per cent in 1968/69. The corresponding figure for 1959/60 was 3 which indicate a very insignificant increase in the share of indirect taxes over a period

of 10 years. The picture is almost identical whether one uses current prices or constant prices. This is, however, explained by the use of general wholesale price index in order to deflate the current price indirect tax figure.

9. Direct Taxes

Estimates of direct taxes were necessary to arrive at the disposable income which is defined here as the Gross National Product at factor cost less direct taxes. Conventional definition, however, uses the concept of Net National Product at factor cost to arrive at the estimate of disposable income. This could not be followed here because of lack of data on depreciation. In any case, the difference between gross and net is not likely to be very large. Direct taxes included some provincial taxes and some central taxes. Provincial direct taxes were land revenue and agricultural income tax, while the central government direct taxes were income tax, estate duty and wealth and gift tax. The summary statement of the provincial revenue recipts as shown in Economic Survey of East Pakistan, 1969-70 was the source for the amount of direct taxes collected by the provincial government in different years.

For a long time, the central tax figures were not published by region. The first attempt was made in Budget in Brief 1970-71 to record important central taxes by point of collection. This,

however, is likely to underestimate the contribution of Bangladesh, since some of the burden of taxes may be shifted away through transfer of income to the West by both individuals as well as businesses. However, since there are no data available on the magnitude of income transfer between Bangladesh and West Pakistan, no attempt has been made to adjust for this factor. Furthermore, in the case of indirect taxes, the burden may be shifted from the point of collection so that the actual contribution may come from the region where the tax has not been recorded. Such shift could be measured from the nature of the commodities exchanged through interwing trade, but this was not attempted here. So all that was done was to add up the recorded figures for the tax collection under different heads from Bangladesh. The Budget in Brief 1970-71 contained data for 1960-61 and later years. For 1959-60, the pre-March 1971 Pakistan figure which was also obtained from the above document was divided between Bangladesh and Pakistan in the same proportion as that of 1960-61. Current price direct tax figures were deflated by the implicit GNP (at factor cost) deflator to arrive at constant price figures.

The growth pattern of direct taxes as observed over the last decade (Table 2) is no different from that of indirect taxes. As a matter of fact, the collection under direct taxes has grown at a much slower rate than that of indirect tax. What is most disconcerting is that direct tax as a proportion of GDP has remained more or less

the same-over the period 1959/60 to 1968/69. Furthermore, its share of total tax collection has declined from 26 per cent of 1959/60 to 18 per cent in 1968/69. This is quite contrary to what should have been the aspiration of a developing country to like Bangladesh. Since total income has grown over this period it indicates that the marginal rate of direct tax has been lower than the average. All of these clearly suggest, that a thorough analysis of the existing tax structure is in order, if one has to suggest means for greater domestic resource unobilisation. It may be added here that total tax collection as a per centage of GDP increased from a meagure 4.2 to 5.4 during 1959/60 to 1968/69.

TABLE 2

Bangladesh: Direct Taxes and Indirect Taxes as Percentage of GDP

Year	GDP at constant 1959/60 Factor cost (Tk. Million)	Direct Taxes (Tk. Million)	Indirect Taxes (Tk. Million)	As a percentage of GDP		
				Total Taxes	Direct Taxes	Indirect Taxes
1959/60	14,245	172	428	4.2	1.2	3.0
1960/61	14,938	175	485	4.4	1.2	3.2
1961/62	15,883	214	519	4.6	1.3	3.3
1962/63	15,893	148	570	4.5	0.9	3.6
1963/64	17,476	258	692	5.4	1.5	4.0
1964/65	17,881	246	815	5.9	1.4	4.6
1965/66	18,625	252	793	5.6	1.4	4.3
1966/67	19,191	239	771	5.3	1.2	4.0
1967/68	20,695	251	928	5.7	1.2	4.5
1968/69	21,151	213	938	5.4	1.0	4.4

Percentages for direct and indirect taxes may not add up to total because of rounding errors.

Source: Appendix Table 2.

III. Expenditure Account

1. Methodology

The basic data derived above on production account were used to construct a complete national expenditure account. Total fixed investment and stock formation figures in current prices were available separately. The sum of the two gave the estimates of total investment in various years. From the balance of payments data it was possible to obtain a series for net capital inflow in current prices. Savings was estimated as the difference between total investment and net capital inflow. The total consumption series was obtained by subtracting the savings estimate from the estimate of GNP at market prices. Total consumption was divided between government and private consumption according to the proportions indicated by pre-March 1971 Pakistan data. In the constant 1959/60 prices expenditure account it was the net capital inflow rather than consumption that was derived as a residual. Current prices series on Gross National Product, total fixed investment, stock formation, private and government consumption were all converted into constant prices by deflating by the appropriate indices. Then estimated total consumption was subtracted from Gross National Product at market prices to obtain the estimate of total savings which in turn was subtracted from the total investment to derive net capital inflow at constant prices.

2. Total Fixed Investment

Because this is a very important component of the regional expenditure used to obtain indirect estimate of the total consumption, it is necessary to discuss in some detail the source of data and the underlying methodology for estimation. The investment figures in current prices are taken from the Final Evaluation of the Second Five Year Plan (1966), Memorandum for the Pakistan Consortium 1967-68, and the Preliminary Evaluation of the Third Five Year Plan (1965-70). All of these documents were prepared by the Pakistan Planning Commission. The series obtained is consistent with respect to the method of estimation. The estimate includes only the fixed investment (monetized and nonmonetized). The stock formation is treated separately.

In the estimation of domestic fixed capital formation, the Planning Commission adopts the Production or Commodity-Flow method as opposed to the Expenditure method. The method involves the collection of data on domestic output, exports and imports of capital goods with the necessary adjustments to account for transportation, installation, taxes and duties, and trade mark-ups and other services related to acquisition and installation. The investment estimates were derived on the basis of three components: a) machinery and equipment; b) transport equipment; and c) construction.

The estimates for (a) and (b) above appear to be fairly accurate. The c.i.f. value of imported materials is available from the foreign trade statistics collected at the port of entry, thus ensuring almost complete coverage. The same is true of export figures. To obtain the users' cost of imports, statutory rate of duty, sales tax transport cost and the cost of installation are added to the value of imports as recorded at the port of entry.

Domestic output was obtained by using the CMI (Census of Manufacturing Industries) data and the index of industrial production. Exports were deducted to get the estimate of domestic use out of domestic production. However, the coverage is concentrated on the large scale industries (employing 20 persons or more), thus indicating that there was some underestimation of the domestically produced machinery and equipment, but it is unlikely to be very significant. So the ex-factory value of this machinery and equipment, the sales tax, transportation cost, and the cost of installation were added together to get the value at the site. It should be noted here that there is an additional problem involved in obtain-ing an estimate of transport equipment for investment purpose, since a portion of it is devoted to consumption. The Pakistan Planning Commission apparently used somewhat arbitray percentages to allocate transport equipment which may have dual use. Finally, the estimate of construction was made on the basis of its two key imputs: cement and construction steel. Separate estimates were made

of the availability of cement and construction steel in the same way as that for machinery and equipment. It was assumed that cement and steel are used in the construction activity in some fixed proportion. On the basis of this proportion, the total use of cement and construction steel in every year was determined. Then certain assumptions were made about the proportion of the total construction expenditure accounted for by cement and steel. Two sets of percentages were assumed, one for factory buildings and the second for construction for other purposes. The percentage for factory buildings ranged between 27.5 and 30.0 and for other purposes between 18.5 and 25.0 From these percentages and the figures for the total use of cement and construction steel, the value of the construction activity could easily be determined. The fixed investment estimates for various years were determined by summing the estimates of machinery, equipment and construction.

In order to arrive at constant price fixed investment estimate, the C.S.O. used an investment index as deflator. However, this index is not available in any one of the published documents of the C.S.O. So, a special investment index was constructed for the present exercise by using the price indices of various investment goods. In addition, a wage index was constructed on the basis of data for the wages of construction workers. Thus, the investment index used here was derived by combining the separate price indices for metal products, machinery, cement, tire/tube and the wage index

of construction workers. The basic data were obtained from 20 years of Pakistan in Statistics, C.S.O. Monthly Statistical Bulletin (August 1970), Statistical Digest of East Pakistan (166, 1968), and Monthly Statistical Bulletin (January 1969) of the Government of East Pakistan. All data relating to the construction of an investment price index are given in Appendix Table 12 and Table 13. Data on fixed investment are given in details in Appendix Table 3, Table 4, Table 10a and Table 10b. A summary of total fixed investment and investment price index in current and constant prices are presented in Table 3 below. It should be pointed out that all

TABLE 3

Bangladesh : Total Fixed Investment and Investment Price Index 1959/60 to 1968/69

Tk. Million

Year	Total Fixed Investment		Investment Price Index (1959/60 =100)
	Constant 1959/60 Prices	Current Prices	
1959/60	1024	1024	100.0
1960/61	1125	1262	112.2
1961/62	1482	1762	118.9
1962/63	1507	1835	121.8
1963/64	1915	2442	127.5
1964/65	2210	2889	130.7
1965/66	1722	2385	138.5
1966/67	2081	2978	143.1
1967/68	2390	3461	144.8
1968/69	2389	3815	159.7

Source : Col. 1. Appendix Table 3.
Col. 2. Appendix Table 4.
Col. 3. Appendix Table 12.

investment figures are presented in gross terms. Net investment series could not be constructed because of lack of adequate data on yearly replacement investment. Total fixed investment in both constant and current prices indicates a steady growth over time. The annual compound rate of growth of fixed investment over the period 1959/60 to 1968/69 has been 8.8 per cent. Growth was, however, faster during 1959/60 to 1964/65 (13.7 per cent per annum) that during the period following (8.5 per cent per annum).

3. Incremental Gross Fixed Capital/Income Ratio

One can use the data on gross fixed investment and GDP at constant prices and calculate incremental gross fixed investment/income ratio. Assuring one year time lag between investment and income, incremental capital income ratios as defined above are calculated for various interval of years. These are shown in Table 4 below. As expected the capital income ratio reflect a high degree of instability when annual data are used. Fluctnations in capital/income ratios are reduced when one uses three year averages and their movement appear over more reasonable if five yearly averages are used.

The five yearly averages indicate that incremental gross fixed investment/income ratio for Bangladesh increased from 1.93 during the Second Five Year Plan of Pakistan to 2.45 during the first four years of the Third Five Year Plan. The latter can be compared

TABLE 4

Bangladesh : Incremental Capital/Income Ratio

Period	Capital/Income Ratio
1960/61	1.47
1961/62	1.19
1962/63	148.2
1963/64	0.95
1964/65	4.72
1965/66	2.97
1966/67	3.04
1967/68	1.38
1968/69	5.24
1959-60 to 1961-62	0.76
1961-62 to 1963-64	1.87
1963-64 to 1965-66	3.59
1965-66 to 1967-68	1.83
1959-60 to 1964-65	1.93
1965-66 to 1968-69	2.45

Source : Appendix Table 2 and Table 4.

n the figure 2.1 estimated by the Pakistan Planning Commission the period 1964-65 to 1967-68.[13] What one can conclude from this that, the capital cost of development in Bangladesh increased siderably during the Third Plan as compared with the Second Plan. arly, new investment was made in projects with relatively higher ital intensity, particularly those relating to social and physical rastructure. The resultant loss in productivity should, under mal circumstances, have been reflected in increased productive acity in the economy in later period so that the capital/income io would go down. It is not possible to present any further lysis of the trend in the productivity of capital [14] in Bangladesh ause data for the remaining years before the war of liberation are available. However, one perhaps gets a slightly better view of e changes within the economy if the movement of the three yearly erages of capital/income ratio is examined. This set clearly dicate two phases in the movement of capital/income ratio over time. ring the early sixties capital/income ratio seem to have increased adually, the peak being reached with the start of the Third Five ar Plan. After that there is a decline in the capital/income ratio.

Government of Pakistan, Planning Commission, Report of the Advosory nels for the Fourth Five Year Plan 1970-75, Volume I (Islamabad, ly 1970), Page 43.

Temporal changes in incremental capital/income ratio reflect anges in total productivity of capital. This should not be confused th marginal productivity of capital which is relevant only under teris paribus condition.

with the figure 2.1 estimated by the Pakistan Planning Commission for the period 1964-65 to 1967-68.[13] What one canconclude from this is that, the capital cost of development in Bangladesh increased considerably during the Third Plan as compared with the Second Plan. Clearly, new investment was made in projects with relatively higher capital intensity, particularly those relating to social and physical infrastructure. The resultant loss in productivity should, under normal circumstances, have been reflected in increased productive capacity in the economy in later period so that the capital/income ratio would go down. It is not possible to present any further analysis of the trend in the productivity of capital [14] in Bangladesh because data for the remaining years before the war of liberation are not available. However, one perhaps gets a slightly better view of the changes within the economy if the movement of the three yearly averages of capital/income ratio is examined. This set clearly indicate two phases in the movement of capital/income ratio over time. During the early sixties capital/income ratio seem to have increased gradually, the peak being reached with the start of the Third Five Year Plan. After that there is a decline in the capital/income ratio.

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[13] Government of Pakistan, Planning Commission, Report of the Advosory Panels for the Fourth Five Year Plan 1970-75, Volume I (Islamabad, July 1970), Page 43.

[14] Temporal changes in incremental capital/income ratio reflect changes in total productivity of capital. This should not be confused with marginal productivity of capital which is relevant only under ceteris paribus condition.

This is explained by the fact that after the initial period of large investment in infrastructure was over, investment in other sectors became relatively more profitable implying that a unit investment in GDP could now be obtained through significantly less investment than before, However, since investment and income series are not available beyond 1968-69, it is not possible to say whether this trend in capital/income ratio was maintained or not.

The above discussion about the movement of capital/income ratio can be examined in the light of results obtained from an optimum exercise on long term development of Bangladesh by M. Alamgir taking explicit account of various constraints (particularly capital and foreign exchange) operating on the economy[15]. The study which covers the period 1965-85, does not reveal any significant trend over the whole period in the capital cost of development. However, there is a tendency to economise capital in the first half of the planning period when capital is a binding constraint. This trend is reversed during the latter half when capital is no longer a binding constraint. However, even during this period there is no consistent upward trend. On the contrary only during the first period after capital constraint becomes non-binding that capital/income ratio goes up, the period following it declines again. Following this analysis one can explain

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[15] M. Alamgir, A Planning Model for East Pakistan with Special Emphasis on Manpower and Education, an unpublished Ph.D. thesis at Harvard University, (Cambridge, 1971).

the long-term movement in the incremental capital/income ratio in Bangladesh including the trend actually observed in the past. As pointed out above, initial increase in the three yearly capital/income ratio is the reflection of an economy with a very low capital base, undertaking essential investment, among others in infrastructure in order to increase productive capacity. Beyond a certain point need to economise capital become greater and it is also then possible to take advantage of earlier investments so that the two forces act to reduce capital/income ratio some what. However, the trend later need not continue to be a downward movement of the capital/income ratio or for that matter it need not stabilise at that low level. What is likely to happen is that with the increase in income and consequently domestic saving and export potential, capital will no longer be as much a constraint as it is likely to be during the initial phase of development. The result will increasingly larger allocation of resources to sectors where individual projects have a relatively high capital/income ratio, thus raising the capital/income ratio for the economy as a whole. After this phase, however, the increment in capital/income ratio will be determined largely by the level of economic activity in the country, a phenomenon that is observed mostly in developed countries[16].

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[16] It may be pointed out that, fluctuaction in short run (annual) incremental capital/income ratio is quite common in a number of developing countries. Among other things, this is often related to the level of capacity utilization in sectors. Because of the presence of various types of rationing, particularly of foreign exchange for the purchase of raw materials, spare parts etc. the installed capacity in any sector is not usually operated at a uniform level and this contributes significantly to the fluctuation in incremental capital/income ratio.

4. Stock Formation

This item consists primarily of physical change in raw material stocks, [illegible] in progress, stock of finished goods held by enterprises, and government stock piles. The physical changes are valued by the average prices prevailing during the period.

Like several other components of national accounts, data on stock formation were available only for pre-March 1971 Pakistan. No attempt was ever made to obtain a breakdown for Bangladesh and Pakistan Two sets of estimates are available, one done by the Pakistan Planning Commission and the other by C.S.O. The C.S.O. estimate starts from 1963-64, while the Planning Commission estimate covers the entire period under consideration. For overlapping years, the two estimates are quite different. So to ensure consistent methodology and data, the Planning Commission estimate was accepted. In the absence of any further information, the pre March 1971 Pakistan figure was divided between the regions according to the proportion of total fixed investment. The change in stock at current prices was deflated by the general wholesale price index to convert it into constant prices.

5. Net Extefnal Resource Inflow

Net external resource inflow into a region is measured by the deficit in the current account of the balance of payments of the region over the period concerned. Only recently separate, estimates

for Bangladesh and Pakistan have been made. The construction of a complete balance of payments account for these two countries was hindered by difficulty in determining actual receipts and payments in the invisible account of each country from and to the other country and the rest of the world. The first attempt to prepare such an account for the Second Plan period was made by Joseph J. Stern.[17] However, a more comprehensive estimate for a longer period was made by the advisory panel of economists for the Fourth Five Year Plan.

The above panel report actually contained two separate reports, one by the Bengali economists and the other by the Pakistani economists. The latter provided a complete year-by-year data from 1961-62 to 1969-70 which could be adopted for the present purpose. The panelists make no adjustment for invisible transactions between the two regions, primarily because there is virtually no official record of the movement of resources on invisible account. The Panel obtains trade data from the C.S.O. except for 1967-68. By using the C.S.O. 1967-68 data, the balance of payments deficit for that year could not be explained. The total trade deficit figure was adjusted for that year in line with the State Bank data. However, the proportion for Bangladesh and Pakistan revealed by the C.S.O.

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[17] Joseph J. Stern, Growth, Development and Regional Equity in Pakistan, an unpublished Ph.D. thesis at Harvard University, 1967, p. 53. An earlier attempt was made in the State Bank of Pakistan with only one year data, i.e., 1957-58.

figures were maintained. The figures for items in the invisible account were obtained from the revised estimates used for Exchange Control Budget. The following were approximately the assumptions on which the division of invisible foreign account was based.

a) All invisible payments of the government abroad on a 50% basis;
b) Debt servicing (interest only) was divided as 30% for Bangladesh and 70% for Pakistan;
c) Other invisible payments were allocated either in proportion of imports or in proportion of investment;
d) Invisible income on foreign assets were attributed to the two regions on a 50% basis.

The above set of assumptions is only one of many possibilities. Final judgement should perhaps be postponed until more accurate information is available.

The panel report, however, did not provide data on invisible trade for 1959-60 or 1960-61. Therefore linear time trends were fitted to the data for invisible payments and receipts of Bangladesh over the period 1961-62 to 1968-69 obtained by the method described above. These time trends were then used for backward projection in order to derive separate estimates of invisible payments and receipts for 1959-60 to 1960-61.

Net capital inflow at constant prices was obtained as a residual. The estimate of saving at constant prices was subtracted from the estimate of total investment at constant prices to arrive at the estimate of net capital inflow at constant prices. The methodology for estimating saving is explained below.

6. Saving

Saving at current prices has been estimated as the difference between the total investment (fixed plus changes in stock) and net capital inflow. The concept of saving as used here includes both private and government saving. Since the pre-March 1971 Pakistan figure for stock formation is somewhat arbitrarily divided between Bangladesh and Pakistan, the resultant saving estimate may be different from the actual. However, from the data on stock formation, it appears that the total magnitude involved is a very small proportion of the Gross National Product, so the effect of underestimating or overestimating the amount of domestic saving cannot be too serious for any analysis. Unfortunately, on direct estimate of total domestic saving is availabl although some estimates [18] of certain components of saving were attempted earlier. Therefore, there is no other reference with which the present indirect estimate could be compared.

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18 Lewis, Stephen R., Jr., and Mohammad Irshad Khan, "Estimates of Non-Corporate Private Saving in Pakistan, 1949-1962," The Pakistan Development Review, Vol.IV, No. I, Spring, 1964. Khadija Haq and M. Haqui, "Savings and Financial Flows in the Corporate Sector, 1959-63," The Pakistan Development Review, Vol.VII,No.3, Autumn, 1967. Abdul Ghafur, "Financial-Asset Accumulation by the Noncorporate Private Sector in Pakistan: 1959/60 to 1965/66," The Pakistan Development Review, Vol. IX, No. I, Spring, 1969.

Several interesting remarks can be made from the result of this exercise, as shown in the current price data in Table 5 and Chart 2. It seems that investment has grown as a proportion of Gross National Product over the Second Plan period, and so has the average rate of saving. However, during the first four years of the Third Five Year Plan, the trend is somewhat erratic because in all years the average rates of investment and saving are less than the level attained in the final year of the Second Plan. This of course can be explained by the increasing defense budget following the Indo-Pakistani conflict. It may be pointed out that over the Second Plan period, Bangladesh was able to save a reasonably high proportion (16.0%) of the incremental income which could not be maintained in the following period (1964-65 to 1968-69).

The most interesting aspect is perhaps the study of the relative importance of saving and foreign capital in total domestic fixed investment in Bangladesh. Over the entire period, Bangladesh contributed over 70% toward investment out of its own resources with the exception of 1960-61 and 1963-64. During 1960-61, the dependence on capital inflow was the highest of the period as 35% of the total investment was financed through foreign capital inflow. If one compares these figures with the average for Pre/ March 1971 Pakistan as given in the Final Evaluation of the Second Five Year Plan and the Mid Plan Review of the Third Five Year Plan, Bangladesh comes out quite favourably in terms of lesser dependence on the external assistance. Alternatively,

TABLE 5

Bangladesh: GNP, Total Investment, Savings 1959/60 to 1968/69

(Tk. Million/Current Prices)

Year	GNP	Total Investment	Savings	As a percentage of GNP		Saving as a percenta-ge of Investment
				Saving	Investment	
1959/60	14656	1294	1252	8.5	8.8	96.8
1960/61	16494	1347	870	5.3	8.2	64.6
1961/62	17433	1881	1534	8.8	10.8	81.6
1962/63	18243	1945	1457	8.0	10.7	74.9
1963/64	18553	2521	1724	9.3	13.6	68.4
1964/65	20722	3171	2221	10.7	15.3	70.0
1965/66	22786	2563	1827	8.0	11.2	71.3
1966/67	26970	3481	2667	9.9	12.9	76.6
1967/68	28505	3660	2798	9.8	12.8	76.4
1968/69	29987	4181	3165	10.6	13.9	75.7

Source: Appendix Table 3.

it may be asserted that with the given level of domestic savings, Bangladesh could perhaps have generated a higher rate of growth if a greater amount of external assistance had been available.

In the case of constant price account, total savings (private and public) of the economy is obtained as the difference between GNP at market prices and total consumption. Therefore there is an asymmetry in the method of estimating savings at current and constant prices. As will be explained later, unlike the current price account, in the constant price account, direct estimate of total consumption is available which could be used to derive estimate of saving. Furthermore, because of few suitable price indices, the estimate of net capital inflow in current prices could not be deflated directly, which ruled out the possibility of estimating saving as the difference between total investment and net capital inflow, the procedure adopted in the current price account.

7. Consumption

Total consumption is estimated as the difference between Gross National Product at current prices and domestic saving. It should be pointed out that estimate of the stock formation through its effect on the saving estimate as described above may also affect the estimate of consumption. However, this is unlikely to be a large proportion of the actual consumption.

The real problem arises in connection with dividing the total consumption into its two components, i.e., government consumption and private consumption. The Central Statistical Office estimates the government consumption directly from the budgets of the central and provincial governments and those of the local bodies. The private consumption expenditure is estimated as a residual. In other words, it is taken to be equal to Gross National Product at market prices less all other components of GNP. Although the government consumption expenditure is estimated from the recorded documents, it suffers from two serious shortcomings which may lead to a large margin of error. First, the data on local governments are very inadequate both in terms of coverage as well as the accuracy of record. Secondly, none of the budget statements follows appropriate economic classification since the present system of classification in the budget is usually governed by the source of finance.

In this exercise the total consumption expenditure for Bangladesh is allocated between government and private consumption on the basis of the proportions revealed from the pre-March 1971 Pakistan data. However, these data were available only for 1963/64 to 1967/68. Therefore, for earlier years the 1963/64 proportion was used as a basis. It is obvious that the above assumption can only be approximately true, but the margin of error is not likely to be very high, since the government consumption expenditure accounts for less than 10% of the total consumption expenditure.

For constant price estimate, the current price estimate of government consumption expenditure was deflated by the general wholesale price index. On the other hand, the implicit GNP (at factor cost) deflator was used to convert the estimate of private consumption expenditure from current prices to constant prices.

IV. Conclusion

The above discussion describes the present attempt to reconstruct the national product and expenditure account for Bangladesh. Needless to say, there is much scope for improving these estimates as more data become available. However, for some preliminary economic analysis, these should be quite helpful. In particular, one can draw some tentative conclusions about the saving and investment effort of Bangladesh over the past decade. Of more special interest is the role played by foreign capital inflow in the process of economic development of Bangladesh. The estimates of private consumption expenditure and disposable income will enable one to estimate a consumption function which can be used for projecting the total consumption expenditure on private account over the course of the next decade or two.

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APPENDIX

LIST OF TABLES

List of Charts

TABLE 1

National Product - Bangladesh 1959/60 - 1968/69 (Tk. Millions/Current Prices)

		1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69
1	Gross domestic product (at current factor cost) as prepared by CSO	14489	16323	17225	18045	18182	19777	21708	25306	26814	28730
2	Adjustments for rice and jute	-494	-584	-608	-662	-619	-336	-463	-123	-232	-886
3	Gross domestic product (at current factor cost) without unallocated items	13995	15739	16617	17383	17563	19441	21245	25183	26582	27844
4	Unallocated items	250	272	281	294	338	369	563	691	714	814
5	Gross domestic product (at current factor cost) with unallocated items	14245	16011	16898	17677	17901	19810	21808	25874	27296	28658
6	Net factor income from abroad	-17	-16	-19	-39	-58	5	5	5	5	5
7	Gross national product at current factor cost	14228	15995	16879	17638	17843	19815	21813	25879	27301	28663
8	Indirect taxes less subsidies	428	499	554	605	710	907	973	1091	1204	1324
9	Gross national product at current market prices	14656	16494	17433	18243	18553	20722	22786	26970	28505	29987
10	Direct taxes	172	188	228	165	264	273	295	322	331	288
11	Disposable income (at current factor cost)	14056	15807	16651	17473	17579	19542	21520	25557	26970	28375

Table I (Continued)

Notes and Sources:

I) Row. I: For the years 1959-60 to 1965-66, Gross Domestic Product at current factor cost, prepared by the C.S.O., was obtain -ed by subtracting from the Gross Domestic Product figure for Pakistan (taken from Pakistan Economic Survey 1968-1969, Ministry of Finance, Government of Pakistan; Statistical Section, Table 2.) The sum of Gross Domestic Product for West Pakistan and the unallo-cated times banking and insurance, P.I.A. and central government and defense (all taken from West Pakistan Bureau of Statistics, Quarterly Bulletin of Performance Statistics, vol. I, no. I, January 1969; Table 2). For the years 1966-67 and 1968-69, data were taken from unpublished information of the C.S.O. and the Planning Commission.

2) Row. 2: Figures are the sum of the adjustment for rice production (Table 5) and jute production (Table 6).

3) Row. 3: Row I + Row 2

4) Row 4: Figures are taken from Table 7a.

5) Row 5: Row 3 + Row 4.

6) Row 6: Figures are taken from Statistical Yearbook 1968, Central Statistical Office, Government of Pakistan (Karachi: Printing Corporation of Pakistan Press, 1970), pp. 320-21; and Monthly Statistical Bulletin, vol. 18, no. 7, July 1970, P. 1294. However, these figures were available for Pakistan as a whole. They were divided equally between Bangla Desh and West Pakistan.

7) Row 7: Row 5 + Row 6.

8) Row 8: Figures are taken from Table 8.

9) Row 9: Row 7 + Row 8.

10) Row 10: Figures are taken from Table 9.

11) Row 11: Row 7 - Row 10.

National Product -

		1949-50	1950-51
0			
1	Gross domestic product (at constant factor cost) as prepared by Khan-Bergah and CSO	12014	12436
2	Adjustments for rice and jute	-730	-558
3	Gross domestic product (at constant factor cost) without unallocated items	11284	11878
4	Unallocated items	189	197
5	Gross domestic product (at constant factor cost) with unallocated items	11473	12075
6	Net factor income from abroad	-18	-17
7	Gross national product at constant factor cost	11455	12058
8	Indirect taxes less subsidies		
9	Gross national product at constant market prices		
10	Direct taxes		
11	Disposable income (at constant factor cost)		
12	Population (Million)	42.25	43.29
13	Per Capita GNP	271	279
14	Rate of growth of GDP (Row 5) over the previous Year		5.2

TABLE 2

Bangladesh 1949/50-1968/69 (Tk. Millions/Constant 1959/60 Prices)

1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59
12754	13192	13671	13348	12769	14002	13803	13362
-525	-584	-487	-485	-469	-354	-432	-462
12229	12608	13184	12863	12300	13648	13371	12900
238	224	216	236	243	212	202	236
12467	12832	13400	13099	12543	13860	13573	13136
-10	-12	-26	-3	-16	-15	-4	-10
12457	12820	13374	13096	12527	13845	13569	13126
44.36	45.45	46.57	47.72	48.90	50.10	51.34	52.60
281	282	287	274	256	276	264	250
3.2	2.9	4.4	-2.2	-4.2	10.5	-2.1	-3.2

TABLE 2
(Continued)

0	Year	1959-60	1960-61	1961-62	1962-63
1	Gross domestic product (at constant factor cost) as prepared by Khan _Bergan and CSO	14489	15310	16206	16130
2	Adjustments for rice and jute	-494	-632	-589	-515
3	Gross domestic product (at constant factor cost) without unallocated items	13995	14678	15617	15615
4	Unallocated items	250	260	266	278
5	Gross domestic product (at constant factor cost)with unallocated items	14245	14938	15883	15893
6	Net factor income from abroad	-17	-9	-14	-33
7	Gross national product at constant factor cost	14228	14929	15869	15860
8	Indirect taxes less subsidies	428	485	519	570
9	Gross National Product at constant market prices	14656	15414	16388	16430
10	Direct taxes	172	175	214	148
11	Disposable income (at constant factor cost)	14056	14754	15655	15712
12	Population (Million)	53.90	55.60	57.30	59.10
13	Per capita GNP	264	269	277	268
14	Rate of growth of GDP (Row 5) & over the previous year	8.4	[illegible].9	6.3	[illegible].06

1963-64	1964-65	1965-66	1966-67	1967-68	1968-69
17855	17965	18569	18734	20346	21249
-681	-407	-426	- 92	-201	-679
17174	17558	18143	18642	20145	20570
302	323	482	549	550	581
17476	17881	18625	19191	20695	21151
-50	5	5	5	5	5
17426	17886	18631	19196	20700	21156
692	815	793	771	928	938
18118	18701	19424	19967	21628	22094
258	246	252	239	251	213
17168	17640	18379	18957	20449	20943
60.90	62.80	64.60	66.50	68.40	70.40
286	285	288	289	303	301
10.0	2.3	4.2	3.0	7.8	2.2

TABLE 2

(Continued)

Notes and Sources:

1) Col. 1: For the years 1949-50 to 1958-59, Gross Domestic Product at constant factor cost before adjustments was calculated from T.M. Khan and A. Bergan, "Measurement of Structural Change in the Pakistan Economy: A Review of the National Income Estimates, 1949-50 - 1963-64," Pakistan Development Review, Vol. VI, Summer 1966, pp. 163-208, by subtracting the sum of unallocated items (banking and insurance, PIA and central government and defense) from their GDP figures. For later years, data are from the Economic Survey of East Pakistan 1969-70, Planning Department, Government of East Pakistan, pp. 102-3.

2) Col. 2: Figures are the sum of the sum of the adjustments for rice production (Table 5) and jute production (Table 6).

3) Row 3: Row 1 + Row 2.

4) Row 4: Figures are taken from Table 7b.

5) Row 5 : Row 3 + Row 4.

6) Row 6: For the year 1954-55 to 1968-69, current price figures obtained from Table 1 and Statistical Yearbook 1968, op. cit., p. 320-21 were deflated to derive constant price estimates. If the net income from abroad was positive, it was deflated by the import price index, and if negative then export price index was used as deflator. Figures for 1949-50 to 1953-54 were taken from Khan and Bergan, op. cit., p. 199. Import and export price indices were taken from Table 15 and Statistical Yearbook 1968, ibid., p. 280. The price indices in the latter document were converted to 1959-60 base.

7) Row 7: Row 5 + Row 6.

8) Row 8: Figures are taken from Table 8.

9) Row 9: Row 7 + Row 8.

10) Row 10: Figures are taken from Table 9.

11) Row 11: Row 7 - Row 10.

12) Row 12: Population estimates are Pakistan Planning Commission estimates.

13) Row 13: Row 7 ÷ Row 12.

14) Row 14: Calculated from Row 5.

0	1	2	3	4	5
Year	GNP at current market prices	Total fixed investment	Stock formation	Total investment	Net capital inflow
1959-60	14656	1024	270	1294	42
1960-61	16494	1262	85	1347	477
1961-62	17433	1762	119	1881	347
1962-63	18243	1835	110	1945	488
1963-64	18553	2442	79	2521	797
1964-65	20722	2889	282	3171	950
1965-66	22786	2385	178	2563	736
1966-67	26970	2978	503	3481	814
1967-68	28505	3461	199	3660	862
1968-69	29987	3815	366	4181	1016

Marginal Rate of Saving

a) Over the Second Plan 16.0

b) Over 1964/65 to 1968/69 10.2

TABLE 3

6	7	8	9	10	11	12
	Consumption					
Regional savings	Total	Private	Govern-ment	Savings (as percentages of GNP)	Invest-ment	Saving as % of invest-ment
1252	13404	12368	1036	8.5	8.8	96.8
870	15624	14416	1208	5.3	8.2	64.6
1534	15899	14670	1229	8.8	10.8	81.6
1457	16786	15488	1298	8.0	10.7	74.9
1724	16829	15528	1301	9.3	13.6	68.4
2221	18501	17123	1378	10.7	15.3	70.0
1827	20959	18861	2098	8.0	11.2	71.3
2667	24303	22437	1866	9.9	12.9	76.6
2798	25707	23782	1925	9.8	12.8	76.4
3165	26822	24813	2009	10.6	13.9	75.7

TABLE 3

(Continued)

Notes and Sources:

1) Col. 1: Taken from Table 1.

2) Col. 2: Taken from Tables 10a and 10b.

3) Col. 3: Taken from Table 11.

4) Col. 4: Col. 2 + Col. 3.

5) Col. 5: Taken from Table 14.

6) Col. 6: Col. 4 - Col. 5.

7) Col. 7: Col. 1 - Col. 6.

8) Total consumption was divided between Government current consumption and private consumption expenditure in the same proportion as that for Pakistan as a whole. The total Pakistan data were obtained from Statistical Yearbook 1968, op. cit., Page 330. However, figures were available only for 1963/64 to 1967/68. For earlier years (1959/60 to 1962/63) the 1963/64 proportion was used and for 1968/69, the previous year (1967/68) proportion was used.

TABLE 4

Regional Expenditure - Bangladesh 1959/60 - 1968-69 (Tk. Millions/Constant 1959/60 Prices)

0	1	2	3	4	5	6	7	8	9
Year	Gross National Product at constant 1959-60 prices	Total fixed investment	Stock formation	Total investment	Net Capital inflow	Regional savings	Total	Consumption Private	Consumption Government
1959-60	14656	1024	270	1294	42	1252	13404	12368	1036
1960-61	15414	1125	83	1208	425	790	14624	13449	1175
1961-62	16388	1482	111	1593	149	1448	14940	13789	1151
1962-63	16430	1507	104	1611	332	1284	15146	13923	1223
1963-64	18118	1915	77	1992	309	1691	16427	15158	1269
1964-65	18701	2210	253	2463	457	2006	16695	15457	1238
1965-66	19424	1722	145	1867	262	1606	17818	16109	1709
1966-67	19967	2081	356	2437	432	2005	17962	16643	1319
1967-68	21628	2390	153	2543	432	2111	19517	18033	1484
1968-69	22094	2389	259	2648	293	2355	19739	18315	1424

TABLE 4

(Continued)

Notes and Sources:

Col. I: Taken from Table 2.

Col. 2: Derived by deflating the current price figure in Table 3 by the investment index obtained from Table 12.

Col. 3: Derived by deflating the current price figures in Table 3 by the general wholesale price index for Bangladesh obtained from Table 15.

Col. 4: Col. 2 + Col. 3.

Col. 5: Col. 4 - Col. 6.

Col. 6: Col. I - Col. 7.

Col. 7: Col. 8 + Col. 9.

Col. 8. Derived by deflating the current price figures in Table 3 by the implicit GNP (factor cost) deflator obtained from Table 15.

Col. 9: Derived by deflating the current price figures in Table 3 by the general wholesale price index.

TABLE 5

Adjustment for Rice Production - Bangladesh 1949/50 - 1968/69
(Current and Constant 1959/60 Factor Cost)

0	Year -	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59
	Rice Production (Million Tons)										
1	Adjusted	6.20	6.20	5.90	6.16	7.01	6.42	5.42	7.10	6.49	5.84
2	Official	7.38	7.34	7.03	7.34	8.25	7.59	6.38	8.19	7.60	6.92
3	Difference	-1.18	-1.14	-1.13	-1.18	-1.24	-1.17	- .96	-1.09	-1.11	-1.08
	Current Factor Cost (Tk. Millions)										
4	Farm Price of Rice (Tk. per ton)										
5	Value of Difference in Production Figures										
6	Adjustment for Value Added in Agriculture										
7	Adjustment for Value Added in Trade										
8	Total Adjustment										
	Constant 1959-60 Factor Cost (Tk. Millions)										
9	Value of Difference in Production Figures	-695	-671	-666	-695	-730	-689	-565	-642	-654	-636
10	Adjustment for Value Added in Agriculture	-646	-624	-619	-646	-679	-641	-525	-597	-608	-591
11	Adjustment for Value Added in Trade	- 39	-37	- 37	- 39	- 41	- 38	- 32	- 36	- 36	- 35
12	Total Adjustment	-685	-661	-656	-685	-720	-679	-557	-633	-644	-626

TABLE 5

(Continued)

	Year	1959-60	1960-61	1961-62	1962-63
	Rice Production (Million Tons)				
1	Adjusted	7.26	8.35	8.33	7.67
2	Official	8.48	9.52	9.47	8.73
3	Difference	-1.22	-1.17	-1.14	-1.06
	Current Factor Cost (Tk. Millions)				
4	Farm price of Rice (Tk. per ton)	589	594	612	723
5	Value of Difference in Production Figures	-719	-695	-698	-766
6	Adjustment for Value Added in Agriculture	-669	-646	-649	-712
7	Adjustment for Value Added in Trade	- 40	- 39	- 39	- 43
8	Total Adjustment	-709	-685	-688	-755
	Constant 1959-60 Factor Cost (Tk. Millions)				
9	Value of difference in Production Figures	-719	-689	-671	-624
10	Adjustment for Value Added in Agriculture	-669	-641	-624	-580
11	Adjustment for Value Added in Trade	- 40	- 38	- 37	- 35
12	Total Adjustment	-709	-679	-661	-615

1963-64	1964-65	1965-66	1966-67	1967-68	1968-69
10.20	9.43	9.40	9.20	10.44	9.99
10.46	10.34	10.33	9.42	10.99	11.16
- 1.26	- .91	- .93	- .22	- .55	-1.17
537	558	671	831	694	768
-677	-508	-624	-183	-382	-899
-630	-472	-580	-170	-355	-836
- 38	- 28	- 35	- 10	- 21	- 50
-668	-500	-615	-180	-376	-886
-742	-536	-548	-130	-324	-689
-690	-498	-510	-121	-301	-641
- 41	- 30	- 31	- 7	- 18	- 38
-731	-528	-541	-128	-319	-679

TABLE 5

(Continued)

Notes and Sources:

I) Row I: Calculated as described in the text.

2) Row 2: Figures are taken from Statistical Digest of East Pakistan, 1968, East Pakistan Bureau of Statistics, Government of East Pakistan; pp. 56-57; and Economic Survey of East Pakistan 1969-70, op. cit., p. 104.

3) Row 3: Row I - Row 2.

4) Row 4: Calculated from non-published value of rice production data of the C.S.O. and Row 2.

5) Row 5: Row 3 x Row 4.

6) Row 6: Row 5 x .93. Based on the information given in the text, value of input was assumed to be 7% of value of output.

7) Row 7: Row 6 x .06. Based on the assumption that 30% of production is marketed, and value added per unit in trade is 20% of value added per unit in agriculture. (Percentages are taken from Pakistan Statistical Yearbook , 1968, op. cit., p. 317).

8) Row 8: Row 6 + Row 7.

9) Row 9: Row 3 x 589. This is the 1959-60 price per ton and was obtained as described in Note 4.

10) Row10: Row 9 x .93. (From note 6.)

11) Row 11: Row 10 x .06. (From note 7.)

12) Row 12: Row 10 + Row 11.

TABLE 6

Adjustment for Jute Production - Bangladesh 1949/50 - 1968/69 (Current and Constant 1959/60 Factor Cost)

0	Year	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59
	Jute Production (Million tons)										
1	Adjusted	.536	1.207	1.302	1.350	.950	1.087	1.114	1.350	1.384	1.076
2	Official	.595	1.072	1.131	1.218	.645	.833	.999	.985	1.107	1.286
3	Difference	-.059	.135	.171	.132	.305	.254	.115	.365	.277	.215
	Current Factor Cost (Tk. Millions)										
4	Farm Price of Jute (Tk. per ton)										
5	Value of Difference in Production Figures										
6	Adjustment for Value Added in Agriculture										
7	Adjustment for Value Added in Trade										
8	Total Adjustment										
	Constant 1959-60 Factor Cost (Tk. Millions)										
9	Value of Difference in Production Figures	-37	86	108	84	193	161	73	231	175	136
10	Adjustment for Value Added in Agriculture	-36	83	105	81	187	156	71	224	170	132
11	Adjustment for Value Added in Trade	- 9	20	26	20	46	38	17	55	42	32
12	Total Adjustment	-45	103	13	101	233	194	88	279	212	164

0	Year	1959-60	1960-61	1961-62
	Jute Production (Million tons)			
1	Adjusted	1.273	.857	1.339
2	Official	992	.796	1.244
3	Difference	.281	.061	095
	Current Factor Cost (Tk. Millions)			
4	Farm Price of Jute (Tk. per ton)	633	1364	692
5	Value of Difference in Production Figures	178	83	66
6	Adjustment for Value Added in Agriculture	173	81	64
7	Adjustment for Value Added in Trade	42	20	16
8	Total Adjustment	215	101	80
	Constant 1959-60 Factor Cost (Tk. Millions)			
9	Value of Difference in Production Figures	178	39	60
10	Adjustment for Value Added in Agriculture	173	38	58
11	Adjustment for Value Added in Trade	42	9	14
12	Total Adjustment	215	47	72

TABLE 6

(Continued)

1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69
1.254	1.114	1.109	1.286	1.191	1.346	1.027
1:125	1.049	951	1:136	1.143	1.191	1.027
.129	.065	.158	.150	.048	.155	.000
595	612	858	839	974	771	903
77	40	136	126	47	120	-
75	39	132	122	46	116	-
18	10	32	30	11	28	-
93	49	164	152	57	144	-
82	41	100	95	30	98	-
80	40	97	92	29	95	-
20	10	24	23	7	23	-
100	50	121	115	36	118	

TABLE 6

(Continued)

Notes and Sources:

1) Row 1: Calculated as described in the text.

2) Row 2: Figures taken from Statistical Digest of East Pakistan, 1968, op. cit., p. 60, and Economic Survey of East Pakistan 1969-70, op. cit., p. 51

3) Row 3: Row L - Row 2.

4) Row 4: Calculated from non-published value of jute production data of the C.S.O. and Row 2.

5) Row 5: Row 3 x Row 4.

6) Row 6: Row 5 x .97. Based on the information given in the text, value of input was assumed to be 3% of value of output.

7) Row 7: Row 6 x .245. Based on the assumption that 98% of production is marketed and value added per unit in trade is 25% of value added per unit in agriculture (percentages are from Pakistan Statistical Yearbook, 1968, op. cit., p. 317).

8) Row 8: Row 6 + Row 7.

9) Row 9: Row 3 x 633. This is the 1959-60 price per ton and was obtained as described in note 4).

10) Row 10: Row 9 x .97 (from note 6).

11) Row 11: Row 10 x .245 (from note 7).

12) Row 12: Row 10 + Row 11.

TABLE 7a

Adjustment for Unallocated Items - Bangladesh 1959/60 -1968/69 Tk. Millions/Current Factor Cost)

0	Year	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69
	PAKISTAN (Pre-March 1971)										
1	Banking and Insurance	224	260	289	317	360	414	479	632	769	934
2	Pakistan International Airways	36	42	50	64	108	108	128	174	174	194
3	Central Government and Defense	739	782	784	796	885	951	1642	1956	1913	2127
4	TOTAL	999	1084	1123	1177	1353	1473	2249	2762	2856	3255
	BANGLADESH										
5	Banking and Insurance	56	65	72	79	90	104	120	158	192	234
6	Pakistan International Airways	9	11	13	16	27	27	32	44	44	49
7	Central Government and Defense	185	196	196	199	221	238	411	489	478	531
8	TOTAL	250	272	281	294	338	369	563	691	714	814

TABLE 7a

(Continued)

Notes and Sources:

I) Rows 1,2,3: For the years 1959-60 to 1965-66, the data are taken from West Pakistan Bureau of Statistics, Quarterly Bulletin of Performance Statistics, op. cit., Table 2, January 1969. For the years 1966-67 to 1968-69, the data are based on unpublished information from the C.S.O. and the Pakistan Planning Commission. Banking and Insurance was obtained directly from this information. PIA and the Central Government and Defense were obtained by subtracting from the pre-March 1971 Pakistan figure for Transport and Public Administration respectively, the sum of Bangladesh and Pakistan data for these components. The 1967-68 (figure for PIA obtained this way was not consistent with the rest of the series nor with the constant factor cost figure, obtained independently. It was therefore set equal to the figure for the previous year.

2) Row 4: Row I + Row 2 + Row 3.

3) Rows 5,6,7: Obtained by multiplying respectively rows 1,2,3 by .25

4) Row 8: Row 5 + Row 6 + Row 7.

TABLE 7b

Adjustment for Unallocated Items - Bangladesh 1949/50 - 1968/69 (Tk. Millions/Constant 1959/60 Factor Cost)

0	Year	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59
	PAKISTAN (Pre-March 1971)										
1	Banking and Insurance	77	84	92	99	108	111	135	166	162	184
2	Pakistan International Airways	-	-	-	-	-	-	-	6	14	26
3	Central Government and Defense	680	702	860	796	756	830	834	670	626	732
4	TOTAL	757	786	952	895	864	941	969	842	802	942
	BANGLADESH										
5	Banking and Insurance	19	21	23	25	27	28	34	42	41	46
6	Pakistan International Airways	-	-	-	-	-	-	-	2	4	7
7	Central Government and Defense	170	176	215	199	189	208	209	168	157	183
8	TOTAL	189	197	238	224	216	236	243	212	202	236

0	Year	1959-60	1960-61	1961-62
	PAKISTAN (Pre-March 1971)			
1	Banking and Insurance	224	247	268
2	Pakistan International Airways	36	42	50
3	Central Government And Defense	739	747	745
4	TOTAL	999	1036	1063
	BANGLADESH			
5	Banking and Insurance	56	62	67
6	Pakistan International Airways	9	11	13
7	Central Government and Defence	185	187	186
8	TOTAL	250	260	266

TABLE 7b

(Continued)

1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69
299	325	357	415	503	591	698
64	64	97	110	137	137	139
749	819	841	1400	1556	1473	1483
1112	1208	1295	1925	2196	2201	2320
75	81	89	104	126	148	175
16	16	24	28	34	34	35
187	205	210	350	389	368	371
278	302	323	482	549	550	581

TABLE 7b
(Continued)

Notes and Sources:

I) Row I: For the years 1949-50 to 1958-59 figures were taken from T.M. Khan and A. Bergan, "Measurement of Structural Change in the Pakistan Economy: A Review of the National Income Estimates, 1949-50 - 1963-64," op. cit., p.203; pp.163-208, and for later years from Economic Survey of East Pakistan 1969-70, op. cit., pp. 102-3.

2) Row 2 : For 1956-57 to 1958-59 calculated from Khan and Bergan, cited above, by subtracting from the pre-March 1971 Pakistan transport figure the sum of the Bangladesh and Pakistan figures. For 1959-60 to 1967-68 data are taken from Pakistan Bureau of Statistics, Quarterly Bulletin of Performance Statistics, op. cit., Table I. For 1968-69 the total of unallocated components was taken from Reports of the Advisory Panels for the Fourth Five Year Plan 1970-75, Vol. I, p.132. Figures for banking and insurance (see note I) were subtracted from the above and the difference was distributed between PI.. and central government and defense in the same proportions as applied in 1967-68 (8.56 and 91.44 respectively).

3) Row 3: For 1949-50 to 1958-59 data are from Khan and Bergan. For later years, the sources and methods are the same as described in Row 2.

4) Row 4: Row I + Row 2 + Row 3.

5) Row 5, 6, 7: Obtained by multiplying respectively Row 1,2 and 3 by .25.

6) Row 8: Row 5 + Row 6 + Row 7.

TABLE 8

Indirect Taxes less Subsidies-Bangladesh 1959/60 -1968/69 (Tk. Millions)

	Indirect tax less subsidies at current prices	General Wholesale price index (1959-60 = 100)	Indirect tax less subsidies at constant 1959/60 Prices
1959/60	428	100	428
1960/61	499	102.83	485
1961-62	554	196.78	519
1962-63	605	106.16	570
1963-64	710	102.55	692
1964-65	907	111.27	815
1965-66	973	122.77	793
1966-67	1091	141.48	771
1967-68	1204.	129.71	928
1968-69	1324	141.13	938

Notes and Sources:

Indirect tax less subsidies at current prices - Figures for 1964/65 to 1967/68 are Pakistan Planning Commission estimates. These estima-tes were arrived at by dividing the pre-March 1971 Pakistan figure proportionately to the total tax realization in the two countries. For 1959/60 to 1963/64, Pre-March 1971 Pakistan figures were divided in the same ratio as that of 1964/65 between Bangladesh and Pakistan. Pre-March 1971 Pakistan figures for these years were taken from Memorandum for the Pakistan Consortium, 1966-67, Planning Commission Government of Pakistan, p. 97. No data was available for 1968-69. So, it was assumed that the rate of growth of indirect taxes less subsidies between 1968-69 and 1967/68 was the same as that between 1967/68 and 1966/67.

General wholesale price index - Statistical Yearbook 1968, op. cit., p. 395, and Monthly Statistical Bulletin, Vol. 18, No. 7, July, 1970; Central Statistical Office, Government of Pakistan, p. 1338.

Indirect tax less subsidies at constant 1959/60 prices -- These figures are derived by deflating the corresponding current prices figures by the general wholesale price index for Bangladesh.

TABLE 9

Direct Taxes - Bangladesh 1959/60 - 1968/69
(Tk. Millions/Current and Constant 1959/60 Factor Cost)

	Current Factor Cost			Constant 1959/60 factor cost
Year	1 Collected by Provincial Government	2 Collecyed by Central Government	3 Total	4 Total
1959-60	106	66	172	172
1960-61	123	65	188	175
1961-62	156	72	228	214
1962-63	87	78	165	148
1963-64	146	118	264	258
1964-65	136	137	273	246
1965-66	150	145	295	252
1966-67	165	157	322	239
1967-68	167	164	331	251
1968-69	157	131	288	213

Notes and Sources:

1) Col I.: Includes land revenue and agricultural income tax. Figures are taken from Economic Survey of East Pakistan 1969-70, op. cit., p. 112.

2) Col 2.: Includes income and corporation tax, estate duty and wealth and gift tax. Data for the years 1960-61 to 1968-69 were taken from the Budget in Brief 1970-71, Government of Pakistan, Ministry of Finance, p. 67. The figure for 1959-60 was obtained by imputing to Bangladesh the same proportion of the all Pakistan figure, obtained from the same source, as in 1960-61.

3) Col 3.: Col. I + Col. 2.

4) Col 4.: Col. 3 deflated by the implicit GNP (at factor cost) deflator, given in Table 15. A-33

TABLE 10a

Investment Estimates - Bangladesh 1959/60 - 1965/66

(Tk. Millions/Current Prices)

	1959/60	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66
Construction	709.8	888.3	1,342.7	1,313.8	1,757.4	1,959.2	1,544.5
Machinery	259.3	293.4	329.7	410.1	484.7	675.6	680.4
Transport	54.6	80.7	89.9	110.8	196.6	254.6	159.7
TOTAL	1,023.7	1,262.4	1,762.3	1,834.7	2,441.7	2,889.4	2,384.6

Notes and Sources:

1959/60 to 1964/65: Final Evaluation of the Second Five-Year Plan (1960-65), Planning Commission, Government of Pakistan, December 1966, p. 181.

1965/66: Figure is taken from Memorandum for the Pakistan Consortium 1967-68, Planning Commission, Government of Pakistan, April 1967, p. 137.

TABLE 10b

Investment Estimate - Bangladesh

1966/67 - 1968/69

(Tk. Millions/Current Prices)

	1966/67	1967/68	1968/69
Public Sector	1925	2343	2629
Private Sector	1053	1118	1186
TOTAL	2978	3461	3815

Notes and Sources: Preliminary Evaluation of the Third Five Year Plan (1965-70), Planning Commission, Government of Pakistan, August, 1970, p. 15 and p. 22.

TABLE 11

Estimate of Stock Formation - Bangladesh 1959/60 - 1968/69

(Tk. Millions/Current Prices)

	Fixed Investment			Stock Formation	
Year	Bangladesh	W. Pakistan	Pakistan	Bangladesh	W. Pakistan
1959-60	1024	2014	800	270	530
1960-61	1262	3053	290	85	205
1961-62	1762	3590	360	119	241
1962-63	1835	4495	380	110	270
1963-64	2442	4944	240	79	161
1964-65	2889	5402	810	282	528
1965-66	2385	5341	575	178	397
1966-67	2978	4930	1335	503	832
1967-68	3461	5527	518	199	319
1968-69	3815	5735	915	366	549

Notes and Sources:

I) Fixed Investment - For 1959-60 to 1964/65, Final Evaluation of the Second Plan, op. cit. p. 181.

For 1965-66, Memorandum for the Pakistan Consortium, 1967/68, op. cit. p. 137.

For 1966-67 to 1968-69, Preliminary Evaluation of the Third Plan, op. cit. p. 15 and p. 22.

2) Stock Formation Pre-March 1971 Pakistan data are taken from Final Evaluation of the Second Plan, ibid. p. 144 and Preliminary Evaluation of the Third Plan, ibid. p. 12.

Pre-March 1971 Pakistan data was divided between the regions in proportion of total fixed investment.

TABLE 12

Construction of Price Index for Investment (1959/60 = 100)

Bangladesh 1959/60 - 1968/69

Year	Metal Products	Machinery	Cement	Tyre/Tube	Wage	Total
1959-60	100.0	100.0	100.0	100.0	100.0	100.0
1960-61	129.8	100.0	115.9	95.2	111.3	112.2
1961-62	134.1	100.0	144.7	92.2	117.9	118.9
1962-63	133.3	100.6	144.7	92.2	129.4	121.8
1963-64	138.8	101.4	147.8	98.4	141.8	127.5
1964-65	133.2	106.4	149.1	104.8	151.8	130.7
1965-66	155.1	109.0	164.2	106.9	148.7	138.5
1966-67	167.4	110.2	165.2	106.8	152.8	143.1
1967-68	181.9	110.2	163.8	110.1	144.9	144.8
1968-69	230.1	110.2	163.8	112.3	155.3	159.7

Notes and Sources:

I) Commodity price indices are taken from 20 Years of Pakistan in Statistics, Central Statistical Office, Government of Pakistan, pp. 206-208; and Monthly Statistical Bulletin, Vol. 18, NO. 8, August 1970; Central Statistical Office, Government of Pakistan, p. 1460. Index of wages refers to construction workers and are constructed on the basis of data provided in Statistical Digest of East Pakistan, 1966, 1968; Bureau of Statistics, Government of East Pakistan. See Table 13.

2) Total investment index is derived by taking the weighted average of individual indices. The following weights were used for different indices:

Metal Products	.25
Machinery	.25
Cement	.15
Tyre/Tube	.10
Wage	.25

These weights are derived on the basis of detailed investment estimates as given in various Pakistan Planning Commission documents cited in notes to Table 10a.

TABLE 13

Index of Wages of Construction Workers (1959/60 = 100)
Bangladesh 1959/60 - 1968/69
(Wage Per Diem)

Year	Manson	Index	Helper	Index	Carpenter	Index	Total Index
1959-60	4.36	100.0	2.37	100	4.56	100	100
1960-61	4.35	105.7	2.64	111.4	5.33	116.9	111.3
1961-62	5.44	121.5	2.71	114.3	5.38	118.0	117.9
1962-63	6.85	126.9	3.07	129.5	6.01	131.8	129.4
1963-64	6.75	152.7	3.25	137.1	6.19	135.7	141.8
1964-65	7.27	164.5	3.55	149.7	6.44	141.2	151.8
1965-66	7.31	165.4	3.39	143.0	6.28	137.7	148.7
1966-67	7.67	173.5	3.44	145.1	6.38	139.9	152.8
1967-68	6.87	155.4	3.44	145.1	6.12	134.2	144.9
1968-69	7.15	181.0	3.50	147.7	6.25	137.1	155.3

Notes and Sources:

I) Only three types of construction workers are included in constructing the index of wages. The total index is an arithmetic average of the indivudual indices.

2) Wage data are taken from Statistical Digest of East Pakistan, 1966, (pp. 194-5), 1968, (I. 123), op. cit., and Monthly Statistical Bulletin, vol. xix, No. 7, January 1969, Bureau of Statistics, Government of East Pakistan, 1.47. In general, wage rates are quoted separately for major cities of Bangladesh (Dacca, Chittagong, Khulna and and Rajshahi). Figures above represent the arithmetic average of wages in different cities. For 1968-69, the data refer to July-December 1968. 1959-60 data which was taken from Statistical Digest (1966) represent an arithmetic average of data for 1959 and 1960 over all cities quoted.

TABLE 14

Balance of Payments Bangladesh 1959/60 - 1968/69 (Tk. Millions)

Year	Payments				Receipts				Surplus (+) Deficit (-)
	International (other than Pakistan) Imports	Imports from Pakistan	Invisible payments	Total	International (other than Pakistan) Exports	Exports to Pakistan	invisible Receipts	Total	
1959-60	655.0	569.4	343.4	1567.8	1080.0	362.4	83.3	1525.7	- 42.1
1960-61	1015.0	825.5	375.4	2215.9	1259.0	363.5	116.7	1739.2	-476.7
1961-62	873.0	855.1	484.9	2213.0	1300.0	402.0	164.0	1866.0	-347.0
1962-63	1019.0	957.1	396.1	2372.2	1249.0	471.5	163.8	1884.3	-487.9
1963-64	1448.0	895.2	411.8	2755.0	1224.0	511.2	223.3	1958.5	-796.5
1964-65	1702.0	874.5	436.4	3012.9	1268.0	537.1	257.4	2062.5	-950.4
1965-66	1328.1	1208.6	648.8	3185.5	1514.1	651.8	292.1	2458.0	-727.5
1966-67	1566.6	1324.8	527.2	3418.6	1574.7	738.9	291.0	2604.6	-814.0
1967-68	1612.5	1233.2	620.2	3465.9	1484.2	784.9	335.1	2604.2	-861.7
1968-69	1823.4	1385.2	628.7	3837.3	1542.7	870.5	408.1	2821.3	-1016.0

TABLE 14

(Continued)

Notes and Sources:

I) All data except for the invisible payments and receipts of 1959-60 and 1960-61 are taken from Reports of the Advosory Panels for the Fourth Five Year Plan 1970-75, Vol. I, Planning Commission, Government of Pakistan, July 1970, p. 153.

2) The panel report referred to above did not contain data for 1959-60 and 1960-61. Data from other sources were not reconcilable with the panel report figures for other years. Therefore a linear time trend was fitted by least square regression to the payments and receipts data in order to obtain figures for 1959-60 and 1960-61.

3) Surplus and deficit refer to the difference between total (Pakistan and foreign) payments and receipts.

TABLE 15

Import, Export and Wholesale Price Indicies and Implicit GNP (At Factor Cost) Deflator (1959/60 =100)
Bangladesh 1959/60 - 1968/69

Year	General Wholesale Price Index		Bangladesh		GNP at current factor cost (Tk. Million)	GNP at constant 1959-60 factor cost (Tk.Million)	Implicit Deflator
	Bangladesh	Pakistan	Import Price Index	Export Price Index			
1959-60	100.00	100.00	100.00	100.00	14228	14228	100.00
1960-61	102.83	104.77	113.87	174.06	15995	14929	107.14
1961-62	106.78	104.65	108.64	134.34	16879	15869	106.36
1962-63	106.16	102.86	117.66	118.88	17638	15860	111.21
1963-64	102.55	106.35	102.19	116.37	17843	17426	102.39
1964-65	111.27	113.55	104.38	138.67	19815	17886	110.78
1965-66	122.77	112.03	110.06	133.70	21813	18631	117.08
1966-67	141.48	124.36	95.91	166.63	25879	19196	134.81
1967-68	129.71	125.68	96.47	137.51	27301	20700	131.88
1968-69	141.13	129.54	104.74	134.08	28663	21156	135.48

TABLE 15

(Continued)

Notes and Sources:

I) General Wholesale Price Index - Statistical Yearbook 1968, op. cit., p. 395, and C.S.O. Monthly Statistical Bulletin July 1970, op. cit., p. 1338.

2) Import and Export Price Index - Basic data were taken from Statistical Yearbook, ibid. p. 280; However, the base year used was 1954/55 base, which was converted to 1959/60. Separate index was not available for Bangladesh for 1968/69. For that year the pre-March 1971 Pakistan index is assumed to be the same as that of Bangladesh. Pre-March 1971 Pakistan indices were obtained from Economic Survey of Pakistan 1970-71, Ministry of Finance, Government of Pakistan.

3) GNP at current factor cost: Table I

4) GNP at constant factor cost: Table 2.

TABLE 16

Gross Domestic Product by Sector - Bangladesh 1959/60 - 1968/69
(Tk. Millions/Current Factor Cost)

0 Year	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69
1 Agriculture	8546	9716	10078	10550	9985	11141	12305	14785	15516	15708
2 Mining	-	1	2	3	5	10	4	5	5	5
3 Manufacturing	912	1058	1111	1141	1189	1283	1657	1783	1877	2133
a) Large scale	406	500	548	578	616	677	973	1079	1156	1353
b) Small scale	506	558	563	563	573	606	684	704	721	780
4 Construction	224	197	407	397	814	954	978	1104	1263	1633
5 Utilities	20	22	28	55	101	128	148	173	191	204
6 Transport and communications	909	1002	1056	1147	1247	1295	1371	1556	1651	1767
7 Trade	1562	1840	1912	1948	1922	2134	2335	2976	3117	3189
8 Banking and Insurance	56	65	72	79	90	104	120	158	192	234
9 Ownership of Dwellings	935	956	1017	1071	1105	1207	1200	1386	1429	1461
10 Public Administration and Defence	380	428	439	461	588	643	743	864	921	1094
a) Province	195	232	243	262	367	405	332	375	443	563
b) Central	185	196	196	199	221	238	411	489	478	531
11 Services	701	726	776	825	855	911	947	1084	1134	1230
Gross Domestic Product	14245	16011	16898	17677	17901	19810	21808	25874	27296	28658

TABLE 16

(Continued)

Notes and Sources:

I)	Rows 2,3,3(a), 3(b),4,5,9,10a,II:	Calculated ad described in Table I, note I.
2)	Rows 1, 7:	Unadjusted figures obtained as in I); adjusted by data from Tables 5 and 6.
3)	Row 6:	Unadjusted figures obtained as in I); adjusted by data from Table 7(a)
4)	Rows 8, 10(b):	Data are taken from Table 7 (a)
5)	Row 10:	Row 10(a) + Row 10(b).
6)	Gross Domestic Product:	Sum of all items.

TABLE 17

Gross Domestic Product by Sector - Bangladesh 1949/50 - 1968/69
(Tk. Millions/Constant 1959/60 Factor Cost)

Year	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59
Agriculture	7392	7803	7880	8186	8556	8219	7589	8639	8258	7775
Mining	-	-	-	-	-	-	-	-	-	-
Manufacturing	472	497	522	557	603	651	712	759	802	850
(a) large scale	69	85	101	126	162	200	251	287	319	356
(b) smale scale	403	412	421	431	441	451	461	472	483	494
Construction	58	51	94	102	156	126	135	193	172	144
Utilities	6	7	8	8	9	10	11	12	13	14
Transportation and communication	631	637	684	706	713	779	790	804	836	840
Trade	1331	1436	1524	1506	1553	1478	1418	1535	1553	1492
Banking and Insurance	19	21	23	25	27	28	34	42	41	46
Ownership of Dwellings	755	771	788	799	817	835	853	872	893	913
Public Administration and Defence	284	310	386	368	373	359	371	356	345	382
(a) Province	114	134	171	169	184	151	162	188	188	199
(b) Central	170	176	215	199	189	208	209	168	157	183
Services	525	542	558	575	593	611	630	648	660	680
Gross Domestic Product	11473	12075	12467	12832	13400	13096	12543	13860	13573	13136

0	Year	1959-60	1960-61	1961-62
1	Agriculture	8546	8987	9446
2	Mining	—	1	2
3	Manufacturing	912	986	1054
	a) large scale	406	466	520
	b) small scale	506	520	534
4	Construction	224	184	386
5	Utilities	20	21	26
6	Transportation and communication	909	954	980
7	Trade	1562	1658	1791
8	Banking and Insurance	56	62	67
9	Ownership of Dwellings	935	956	972
10	Public Administration and Defence	380	409	417
	a) Province	195	222	231
	b) Central	185	187	186
11	Services	701	720	742
	Gross Domestic Product	14245	14938	14883

TABLE 17

(Continued)

1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69
9175	9948	10084	10339	10375	11336	11162
4	4	9	4	8	8	10
1110	1165	1210	1433	1539	1658	1799
562	603	633	841	932	1036	1161
548	562	577	592	607	622	638
386	797	892	847	952	1074	1335
51	91	111	128	135	149	169
1085	1144	1128	1217	1231	1307	1250
1809	1890	1937	2020	2182	2303	2406
75	81	89	104	126	148	175
1001	1023	1041	1062	1091	1114	1141
433	545	568	635	688	709	787
246	340	358	285	299	341	416
187	205	210	350	389	368	371
764	788	812	836	864	889	917
15893	17476	17881	18625	19191	20695	21151

1269

TABLE 17

(Continued)

Notes and Sources:

I) Rows 2,3,3(a) 3(b),4,5,9, 10(a), II: Sources given in Table 2, note I.

2) Rows 1, 7: For unadjusted data, same source as in I); adjusted by data from Tables 5 and 6.

3) Row 6: For unadjusted data, same sources as in I); adjusted by data from Table 7b.

4) Rows 8,10(b): Data are taken from Table 7(a).

5) Row 10: Row 10(a) + Row 10(b).

6) Gross Domestic Product: Sum of all items. Figure for 1954-55 is slightly different from that in Table 2 because in the source (Khan and Bergan) the sum of sectoral value added does not add up to GDP.

CHART I

PER CAPITA GNP AT CONSTANT (1959-60) PRICES: Bangladesh 1949-50 - 1968 69

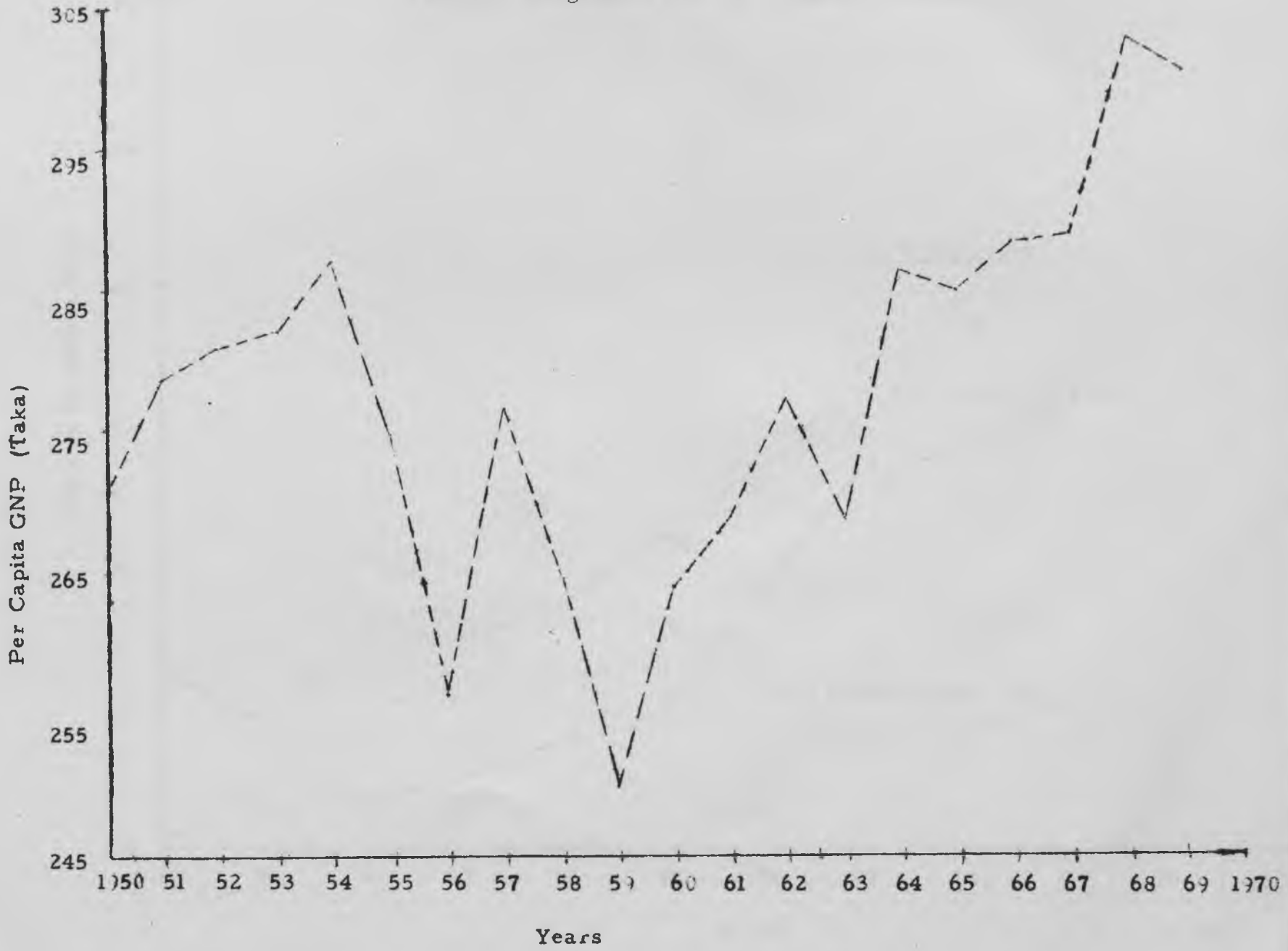

CHART 2

TOTAL INVESTMENT SAVINGS AND NET CAPITAL INFLOW IN CURRENT PRICES : BANGLADESH 1959/60 - 1968-69